

Application No.: 10/723,947

3

Docket No.: 514112000320

AMENDMENTS TO THE CLAIMS

1. (Currently amended) ~~A recombinant ZCCT1 protein coding sequence comprising a nucleic acid that hybridizes to a nucleic acid molecule encoding SEQ ID NO: 75 under hybridization conditions that include at least one wash in 0.1 X SSC and 0.1% SDS at 60-65° for thirty minutes~~ An isolated nucleic acid that encodes a polypeptide having at least 90% identity to the polypeptide encoded by SEQ ID NO: 75.

2. (Currently amended) ~~The recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim 1 wherein said sequence ~~isolated nucleic acid~~ is operably linked to a promoter.

3. (Currently amended) ~~The recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim [[3]]2 wherein the promoter is an inducible promoter.

4. (Currently amended) ~~The recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim [[3]]2 wherein the promoter is a regulated promoter.

5. (Currently amended) ~~The recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim [[3]]2 wherein the promoter is a constitutive promoter.

6. (Currently amended) ~~A vector comprising the recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim 1.

7. (Currently amended) ~~A vector comprising the recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim [[1]] 2.

8. (Currently amended) ~~A vector comprising the recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim 3.

9. (Currently amended) ~~A vector comprising the recombinant ZCCT1 protein coding sequence~~ isolated nucleic acid of claim 4.

sf-2053503

BEST AVAILABLE COPY

Application No.: 10/723,947

4

Docket No.: 514112000320

10. (Currently amended) A vector comprising the ~~recombinant ZCCT1 protein~~
~~coding sequence~~ isolated nucleic acid of claim 5.

11. (Previously presented) A cell comprising the vector of claim 6.

12. (Previously presented) A cell comprising the vector of claim 8.

13. (Previously presented) A cell comprising the vector of claim 9.

14. (Previously presented) The cell of claim 11 wherein said cell is a plant cell.

15. (Previously presented) The cell of claim 12 wherein said cell is a plant cell.

16. (Previously presented) The cell of claim 13 wherein said cell is a plant cell.

17. (Currently amended) A transgenic plant comprising the ~~recombinant ZCCT1~~
~~protein coding sequence~~ isolated nucleic acid of claim 1.

18. (Previously presented) The transgenic plant of claim 17 wherein said plant is
selected from the group consisting of wheat, barley, rye, oats, and forage grasses.

19. (Previously presented) Seed from the transgenic plant of claim 17.

20. (Currently amended) A transgenic plant comprising the ~~recombinant ZCCT1~~
~~protein coding sequence~~ isolated nucleic acid of claim [[3]] 2.

21. (Previously presented) Seed from the transgenic plant of claim 20.

22. (Currently amended) A transgenic plant comprising the ~~recombinant ZCCT1~~
~~protein coding sequence~~ isolated nucleic acid of claim 4.

23. (Previously presented) Seed from the transgenic plant of claim 22.

24. (Currently amended) A method for altering a plant's response to
vernalization, the method comprising: transforming a plant or plant tissue with a

sf-2053503

BEST AVAILABLE COPY

Application No.: 10/723,947

5

Docket No.: 514112000320

genetic construct comprising the ~~recombinant ZCCT1 protein coding sequence~~
isolated nucleic acid [as in] of claim [[3]] 1 and inducing the expression of the
genetic construct in said plant to alter said plant's response to vernalization.

25. (Currently amended) A method for altering a plant's response to
vernalization, the method comprising: transforming a plant or plant tissue with a
genetic construct comprising the ~~recombinant ZCCT1 protein coding sequence~~
isolated nucleic acid [as in] of claim [[4]] 2 and expressing the genetic construct in
said plant to alter said plant's response to vernalization.

26. (Currently amended) The method of claim 24, wherein the plant is selected
from the group consisting of wheat, barley, rye, oats, and forage grasses.

27. (Currently amended) The method of claim 25, wherein the plant is selected
from the group consisting of wheat, barley, rye, oats, and forage grasses.

28.-33. (Withdrawn)

34. (New) The isolated nucleic acid of claim 1 wherein said nucleic acid encodes
a polypeptide having at least 92% identity to the polypeptide encoded by SEQ ID
NO: 75.

35. (New) The isolated nucleic acid of claim 1 wherein said nucleic acid encodes
a polypeptide having at least 95% identity to the polypeptide encoded by SEQ ID
NO: 75.

36. (New) The isolated nucleic acid of claim 1 wherein said nucleic acid encodes
the polypeptide encoded by SEQ ID NO: 75.

BEST AVAILABLE COPY

sf-2053503